

**AMENDMENTS****In the Claims**

Please amend the claims as follows:

**1-177. (canceled)****178. (previously presented) A method comprising:**

providing a nucleic acid, labeled with a unit specific marker, and  
detecting, while the nucleic acid is moved relative to electromagnetic radiation by a  
tethered polymerase, at least one FRET-independent fluorescent signal emitted from the unit  
specific marker.

**179. (currently amended) A method for detecting a unit specific marker bound to a nucleic  
acid comprising**

moving a nucleic acid [[past]] relative to electromagnetic radiation using a tethered  
polymerase,

exposing a fluorescently labeled unit specific marker bound to the nucleic acid to  
electromagnetic radiation, and

detecting an electromagnetic radiation signal from the fluorescently labeled unit specific  
marker in the absence of fluorescence resonance energy transfer.

**180. (previously presented) The method of claim 178, wherein the electromagnetic radiation  
is transported through a waveguide.****181. (previously presented) The method of claim 179, wherein the electromagnetic radiation  
is transported through a waveguide.****182. (previously presented) The method of claim 178, further including storing a signature  
of signals.**

**183. (previously presented)** The method of claim 182, wherein the electromagnetic radiation is transported through a waveguide.